

*C1*  
*Cancelled*

a memory device formatted to store data indicative of the history of the ink cartridge, data indicative of past environment of use of the ink cartridge, and data indicative of past cleaning of the print head, said memory device having an area in which the data is stored in a rewritable manner.

---

*Surf*  
*C1*

3. (Three Times Amended) An ink cartridge for an ink jet type printing apparatus having a print head, the ink cartridge comprising:

*C9*

a container having an ink chamber for containing ink therein;  
an ink supply port for supplying the ink from said ink chamber to the print head;  
a memory device formatted to store data indicative of the history of the ink cartridge, said memory device having an area in which the data is stored in a rewritable manner; and

wherein the data includes data indicative of past maintenance processing required for use in a reproduction of the ink cartridge.

4. (Three Times Amended) An ink cartridge for an ink jet type printing apparatus having a print head, the ink cartridge comprising:

a container having an ink chamber for containing ink therein;  
an ink supply port for supplying the ink from said ink chamber to the print head;

a memory device formatted to store data indicative of the history of the ink cartridge, said memory device having an area in which the data is stored in a rewritable manner; and  
wherein the data includes data indicative of past maintenance processing required for use in a reproduction of the ink cartridge;

wherein the data includes data indicative of a past condition of cleaning.

5. (Three Times Amended) An ink cartridge for an ink jet type printing apparatus having a print head, the ink cartridge comprising:

a container having an ink chamber for containing ink therein;  
an ink supply port for supplying the ink from said ink chamber to the print head;  
a memory device formatted to store data indicative of the history of the ink cartridge, said memory device having an area in which the data is stored in a rewritable manner;

wherein the data includes data indicative of a maintenance processing required for use in a reproduction of the ink cartridge; and

wherein the data includes data indicative of a condition of exchange of a part of the ink cartridge.

7. (Three Times Amended) An ink cartridge for an ink jet type printing apparatus having a print head, the ink cartridge comprising:

a container having an ink chamber for containing ink therein;

an ink supply port for supplying the ink from said ink chamber to the print head;

a memory device formatted to store data indicative of the history of the ink cartridge, said memory device having an area in which the data is stored in a rewritable manner;

wherein the data includes data indicative of the time of final ink depletion of the ink cartridge; and

wherein the data includes data indicative of past maintenance processing required for use in a reproduction of the ink cartridge..

8. (Three Times Amended) An ink cartridge for an ink jet type printing apparatus having a print head, the ink cartridge comprising:

a container having an ink chamber for containing ink therein;

an ink supply port for supplying the ink from said ink chamber to the print head;

a memory device formatted to store data indicative of the history of the ink cartridge, said memory device has an area in which the data is stored in a rewritable manner; and

wherein the data includes data indicative of a past environment in which the ink cartridge was used.

13. (Three Times Amended) An ink cartridge for an ink jet type printing apparatus having a print head, the ink cartridge comprising:

CH  
See  
C  
a container having an ink chamber for containing ink therein;  
an ink supply port for supplying the ink from said ink chamber to the print head; and  
a memory device for storing data related to the ink or the ink cartridge, said memory device storing therein data relating to a minimum ink amount to be contained in the ink cartridge, said memory device having an area in which data indicative of a residual ink amount is stored in a rewritable manner;

wherein said ink cartridge is operable to alter an ink discharge operation during cleaning of the print head based on the stored data relating to the minimum ink amount and the residual ink amount.

14. (Twice Amended) An ink-jet printing apparatus comprising:

a print head for ejecting ink droplets;  
an ink cartridge containing ink therein for supplying the ink to said print head;  
a memory device storing data related to the ink cartridge, data related to past environment of use of the ink cartridge, and data related to past cleaning of the print head;  
a control device accessible to said memory device for controlling said print head in accordance with data supplied from the exterior, said control device controlling a charging of the

AMENDMENT UNDER 37 C.F.R. § 1.111  
Appln. No.: 09/318,268

Attorney Docket No.: Q54505

*Cancel  
DC*  
ink into said print head in accordance with data, stored in said memory device, when said ink cartridge is attached to the printing apparatus; and

said control device determines whether the print head needs cleaning and controls the cleaning operation.